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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,941

12/16/2003

Timothy Charles Robinson

218.1047US

5531

23280 7590 08/18/2008
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EXAMINER

KAWSAR, ABDULLAH AL

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

08/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/736,941	Applicant(s) ROBINSON, TIMOTHY CHARLES	
	Examiner ABDULLAH AL KAWSAR	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-9 are pending.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figure 3 and 6 is not clear after scanning, specifically the shaded portion of the drawing is not clear. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Specification

4. The disclosure is objected to because of the following informalities: update the cross-reference portion of the specification with the updated information (i.e. patent or publication

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number) of the related application and also any other place in the specification that refers to related applications.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teague et al.(Teague) US Patent No. 7043505, in view of Wilner et al.(Wilner) US Patent No. 5872909.

7. As per claim 1, Teague teaches the invention substantially as claimed including a method for displaying analysis data of a partitioned OS comprising the steps of:

reading event information from an event log (col 1, lines 29-35);

determining a partition ID, task name and task state corresponding to the event information (col 5, lines 56-60; col 11, lines 16-19);

a visual representation of the partition ID, task name and task state at a specific, the visual representation positioned to correlate with the partition ID (col 8, lines 26-30; col 8, lines 64-67 through col 9, lines 1-2).

Teague does not specifically disclose displaying on a graphical display, corresponding time on a time graph.

However, Wilner teaches displaying on a graphical display, corresponding time on a time graph (col 5, lines 2-8).

8. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Wilner into the method of Teague for having a graphical display corresponding to a time graph. The modification would have been obvious because one of the ordinary skills of the art would utilize the collected data and display that to a user in a format that is easily understandable and the display could include a tree view or a graph view or any other view including any of the collected attributes that is available to create a display format.

9. As per claim 3, Teague teaches loading an event dictionary corresponding to the partition ID, the event dictionary including event definitions for events corresponding to the partition ID (col 15, lines 24-31; lines 46-52);

determining the task name and task state from the event definitions (col 7, lines 37-41; col 9, lines 41-43; col 16, lines 13-25).

10. As per claim 4, Teague teaches the invention substantially as claimed including a method for monitoring the execution of a plurality of tasks in the memory of a target computer comprising the steps of:

coupling the target computer to a host program with a communications link (col 12, lines 50-66; figure 1);

running a plurality of tasks on the target computer (col 12; lines 56-67; col 7, lines 56-58);

producing event data, the event data including a partition ID (col 11, lines 16-19);

entering the event data into a log with a time stamp (col 11, lines 16-19);

uploading the log to the host (col 13, lines 16-23);

parsing the log to retrieve the event data (col 4, lines 62-67);

accessing the partition ID (col 14, lines 36-45);

loading an event dictionary corresponding to the partition ID (col 15, lines 24-31; lines 46-52);

determining a task name and task state from the event dictionary (col 7, lines 37-41; col 9, lines 41-43; col 16, lines 13-25);

displaying the task name with the partition ID (col 8, lines 26-29; col 11, lines 16-19);

Teague does not specifically disclose displaying the task name on a first axis; displaying time progression on a second axis; displaying a graphical icon representative of the task state at a time on the second axis corresponding to the time stamp.

However Wilner teaches displaying the task name on a first axis (col 5, lines 2-5);

displaying time progression on a second axis (col 5, lines 5-7);

displaying a graphical icon representative of the task state at a time on the second axis corresponding to the time stamp (col 6, lines 40-44; col 8, lines 19-32).

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11. As per claim 5, Teague teaches the producing events step further comprises switching to a second partition and the entering step further comprises entering an indication of the switch to a second partition, and configuration information for the second partition (col 7, lines 10-17; col 11, lines 16-19; col 8, lines 59-62).

12. As per claim 6, Teague teaches the configuration information further comprises the second partition ID, and the second partition event dictionary (col 7, lines 18-35; col 8, lines 59-62; col 15, lines 31-39; col 17, lines 29-38).

13. As per claim 8, it has similar limitations of combination of claims 4 and 5 above.
Therefore it is rejected under the same rational as of combination of claims 4 and 5 above.

14. Claims 2, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teague et al.(Teague) US Patent No. 7043505, in view of Wilner et al.(Wilner) US Patent No. 5872909, as applied to claims 1, 4 and 8 above, and further in view of "Hive: Fault containment for shared-memory multiprocessors" by John Chapin(Chapin).

15. As per claim 2, Teague teaches the partition ID includes a plurality of partition ID's, the core operating system and each partition is associated with a corresponding one of the partition ID's (col 11, lines 16-19; col 12, lines 61-67 through col 13, lines 1-4; col 11, lines 61-66; col 14, lines 40-44).

Teague and Wilner do not specifically disclose implementing a core operating system; providing a system space having a number of memory locations; operating the core operating system to create a number of protection domains to partition the system space; implementing a partition operating system and a partition user application pair in each partition, whereby the partition operating system, partition user application pairs of the partitions are spatially partitioned from each other; operating each partition operating system of each pair to provide resource allocation services to the respective partition user application within the partition.

However, Chapin teaches implementing a core operating system (page 12, left column, “Abstract” lines 3-6, “In this paper..... Kernels called cells.”);

providing a system space having a number of memory locations(page 14, figure 2.1, “Flash architecture”);

operating the core operating system to create a number of protection domains to partition the system space (page 14, left column, “3 Hive Architecture” lines 1-6);

implementing a partition operating system and a partition user application pair in each partition, whereby the partition operating system, partition user application pairs of the partitions are spatially partitioned from each other (page 14, left column, “3 Hive Architecture” lines 1-6; figure 3.2, 3.3 and table 3.4);

operating each partition operating system of each pair to provide resource allocation services to the respective partition user application within the partition (page 12, left column, “Abstract” lines 6-11, “This improves reliability..... Stanford FLASH multiprocessor.”; page 16, Figure 3.3 Intercell optimization using a user level process).

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16. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Chapin into the combined method of Wilner and Teague for having multiple partition and application with separate memory space. The modification would have been obvious because one of the ordinary skills of the art would utilize multi-partition system and monitor application and events in a multi-partition system to be able to manage all the events in a centralized manner without requiring separate event handler.

17. As per claims 7 and 9, they have similar limitations as of claim 2 above. Therefore they are rejected under the same rational as of claims 2 above.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH AL KAWSAR whose telephone number is (571)270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Abdullah-Al Kawsar/
Examiner, Art Unit 2195

/Li B. Zhen/
Primary Examiner, Art Unit 2194